

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: 02GZCO04

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA86986

Client: The Louis Berger Group, Inc.

Date: 03/09/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for twenty (20) filtered water samples analyzed for Particulate Organic Carbon (POC) by Lloyd Kahn.
2. The samples were collected on 09/21/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 09/22/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Lloyd Kahn Method “Determination of Total Organic Carbon in Sediment”, July 27 1988; Accutest Laboratories Standard Operating Procedure “Total Organic Carbon in Soil Samples”, EGN233-07, November 2007 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Particulate Organic Carbon data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SPF-BB-RM2.8	JA86986-3	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-RM2.8	JA86986-6	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-RM3.4	JA86986-9	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-RM5.3	JA86986-12	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-RM6.0	JA86986-15	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-TRIB-ELSIE	JA86986-18	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-TRIB-NEWBRUN	JA86986-21	09/21/11	POC	Filtered Water	
CDEOU4-SPF-BB-RM5.75	JA86986-24	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-HRM2.2	JA86986-27	09/21/11	POC	Filtered Water	Field Duplicate of sample CDEOU4-SWF-BB-RM2.2
CDEOU4-SWF-BB-RM0.4	JA86986-30	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-RM2.2	JA86986-33	09/21/11	POC	Filtered Water	
CDEOU4-SWF-GB-DNBB	JA86986-36	09/21/11	POC	Filtered Water	
CDEOU4-SWF-GB-UPBB	JA86986-39	09/21/11	POC	Filtered Water	
CDEOU4-SPF-BB-RM7.35	JA86986-45	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-RM6.25	JA86986-48	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-RM6.8	JA86986-51	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-RM7.35	JA86986-54	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-RM7.68	JA86986-57	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-RM8.3	JA86986-60	09/21/11	POC	Filtered Water	
CDEOU4-SWF-BB-TRIB-SPRING	JA86986-63	09/21/11	POC	Filtered Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All filtered water samples were analyzed within 28days from sample collection. No qualifications were required.

Initial Calibration:

1. Initial calibration curve analyzed on 09/28/2011 exhibited acceptable correlation coefficient >0.995. No qualifications were required.

Initial and Continuing Calibration Verification (ICV and CCV):

1. All ICV and CCVs %REC values were within the QC limits (90-110%). No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GP60744/GN56145) associated with the filtered water samples analyzed on 09/28/2011 was free of contamination. No qualifications were required.

Laboratory Control Sample (LCS) /Laboratory Control Sample Duplicate (LCSD):

1. Laboratory Control Sample (LCS) associated with Batch #: GP60744/GN56145 analyzed on 09/28/2011 recovered within the laboratory control limits (80-120%). No qualifications were required.

Field Duplicate:

1. Sample CDEOU4-SWF-BB-HRM2.2 (JA86986-27) was collected as field duplicate for sample CDEOU4-SWF-BB-RM2.2 (JA86986-33). POC RPD was $\geq 40\%$. Both samples were qualified (E).

Field Sample	Analyte	Analytical Method	Result	Units	Field Duplicate	Result	Units	RPD	Qualifier
CDEOU4-SWF-BB-RM2.2	POC	Lloyd Kahn	67400	mg/kg	CDEOU4-SWF-BB-HRM2.2	14100	mg/kg	131	E

Laboratory Duplicate:

1. Laboratory Duplicate for POC was performed on sample CDEOU4-SWF-BB-RM7.35 (JA86986-54) (Batch #:GP60744/GN56145). RPD was 5.5% within the laboratory control limit ($\leq 20\%$). No qualifications were required.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD):

1. Matrix Spike (MS) was performed on sample CDEOU4-SWF-BB-RM7.35 (JA86986-54) (Batch #:GP60744/GN56145). POC %REC was within the QAPP control limits (%Rec: 75-125%). No qualifications were required.

Percent Solids of Sediments:

1. Percent solids not analyzed due to sample matrix. Results reported on wet weight basis.

Compound Quantitation and Reported Detection Limits:

1. All sample results were reported within the linear calibration range. No qualifications were required.
2. Calculation:

Particulate Organic Carbon (mg/kg)=

Conc. from curve (µg)

Sample Weight in g x % solid/100

INITIAL CALIBRATION WORKSHEET

Initial Calibration					
Date:		9/28/2011			
Analyte:		POC/TOC		Units: μg	
Measured	Actual	Calculated	% Diff	Calculated	% Diff
Response	Concentration	Value (linear)		Value (quad)	
0	0	0.0	-12.0	0.0	46.1
382.000	0.1	0.1	-12.4	0.1	-8.0
1848.000	0.5	0.5	-0.2	0.5	-0.2
3626.000	1	1.0	2.8	1.0	2.3
9582.000	2.5	2.5	-2.0	2.6	-2.4
14784.000	4	3.9	1.8	3.9	1.7
18967.000	5	5.0	-0.7	5.0	-0.5

LINEAR EQUATION

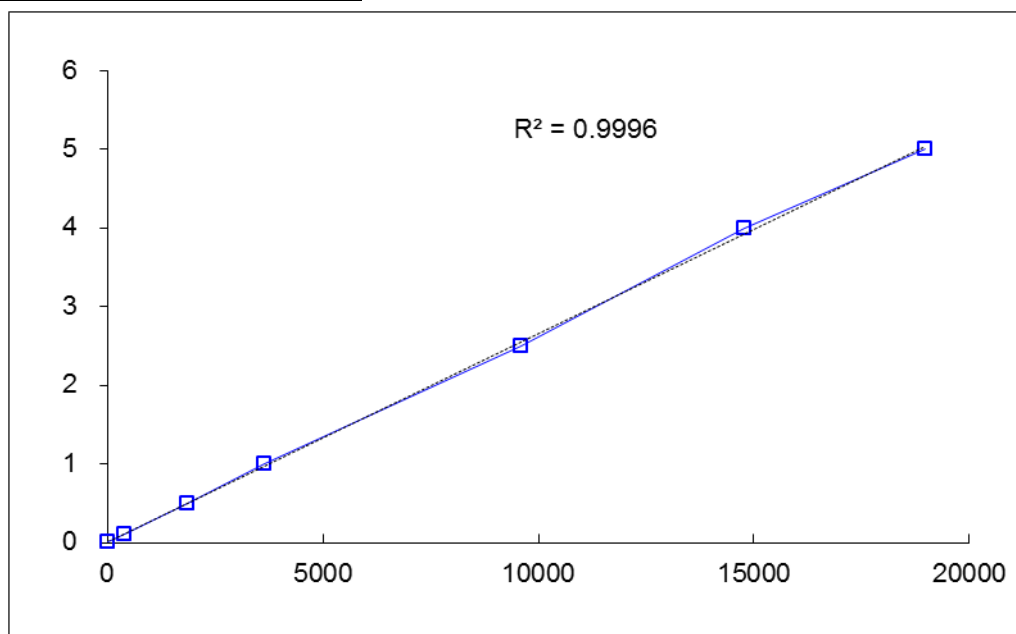
$$y = a + bx$$

a= 0.011
 b= 2.649E-04
 r= 0.99979

QUADRATIC EQUATION

$$y = a + bx + cx^2$$

a= 5.387E-03
 b= 2.686E-04
 c= -2.019E-10
 r= 0.9996



2.1 Sample ID: CDEOU4-SPF-BB-RM2.8 (JA86986-3)

Sample Weight: 50.50g

Concentration from the curve (μg): 2.197

Result (%): 4.350

Final Result (wet): 43500 mg/kg

Analyte	Mean Area	DF	Curve Conc. Linear (μg)	Sample Weight (g)	Conc. (%)	Laboratory (mg/kg)	Validation (mg/kg)	%D
POC	8252	1	2.197	50.50	4.350	43500	43500	0.0

2.2 Sample ID: CDEOU4-SWF-BB-RM7.35 (JA86986-54)

Sample Weight: 50.15g

Concentration from the curve (μg): 2.994

Result (%): 5.9700

Final Result (wet): 59700 mg/kg

Analyte	Mean Area	DF	Curve Conc. Linear (μg)	Sample Weight (g)	Conc. (%)	Laboratory (mg/kg)	Validation (mg/kg)	%D
POC	11257	1	2.994	50.15	5.970	59700	59700	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Sept. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: 02GZCO04

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA86986

Client: The Louis Berger Group, Inc.

Date: 03/12/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for twenty (20) filtered water samples and one (1) rinsate blank analyzed for Dissolved Organic Carbon (DOC) by SM20 5310B, SW-846 Method 9060M.
2. The samples were collected on 09/21/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 09/22/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 5310B “Total Organic Carbon, Combustion-Infrared Method”; Accutest Laboratories Standard Operating Procedure “Total Organic Carbon in Aqueous Samples”, EGN234-11, July 2010 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Dissolved Organic Carbon data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SPF-BB-RM2.8	JA86986-2F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-RM2.8	JA86986-5F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-RM3.4	JA86986-8F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-RM5.3	JA86986-11F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-RM6.0	JA86986-14F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-TRIB-ELSIE	JA86986-17F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-TRIB-NEWBRUN	JA86986-20F	09/21/11	DOC	Filtered Water	
CDEOU4-SPF-BB-RM5.75	JA86986-23F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-HRM2.2	JA86986-26F	09/21/11	DOC	Filtered Water	Field Duplicate of sample CDEOU4-SWF-BB-RM2.2
CDEOU4-SWF-BB-RM0.4	JA86986-29F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-RM2.2	JA86986-32F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-GB-DNBB	JA86986-35F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-GB-UPBB	JA86986-38F	09/21/11	DOC	Filtered Water	
CDEOU4-20110921F-RINSATE	JA86986-41F	09/21/11	DOC	Filtered Water	Rinsate Blank
CDEOU4-SPF-BB-RM7.35	JA86986-44F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-RM6.25	JA86986-47F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-RM6.8	JA86986-50F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-RM7.35	JA86986-53F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-RM7.68	JA86986-56F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-RM8.3	JA86986-59F	09/21/11	DOC	Filtered Water	
CDEOU4-SWF-BB-TRIB-SPRING	JA86986-62F	09/21/11	DOC	Filtered Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All filtered water samples were analyzed within 28days from sample collection. No qualifications were required.

Initial Calibration:

1. Initial calibration curve analyzed on 09/29/2011 exhibited acceptable correlation coefficient >0.995. No qualifications were required.

Initial and Continuing Calibration Verification (ICV and CCV):

1. All ICV and CCVs %REC values were within the QC limits (90-110%). No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GP60766/GN56194) associated with the filtered water samples was analyzed on 09/30/2011.

Laboratory Sample ID	Analyte	Results (mg/l)	Reporting Limit* (mg/l)	Sample(s) Affected	Action
GP60766-MB1	DOC	0.83	1.0	CDEOU4-SPF-BB-RM2.8, CDEOU4-SWF-BB-RM2.8, CDEOU4-SWF-BB-RM3.4, CDEOU4-SWF-BB-RM5.3, CDEOU4-SWF-BB-RM6.0, CDEOU4-SWF-BB-TRIB-ELSIE, CDEOU4-SWF-BB-TRIB-NEWBRUN, CDEOU4-SPF-BB-RM5.75, CDEOU4-SWF-BB-HRM2.2 CDEOU4-SWF-BB-RM0.4, CDEOU4-SWF-BB-RM2.2 CDEOU4-SWF-GB-DNBB, CDEOU4-SWF-GB-UPBB CDEOU4-20110921F-RINSATE CDEOU4-SPF-BB-RM7.35, CDEOU4-SWF-BB-RM6.25 CDEOU4-SWF-BB-RM6.8	None None None None None None None None None U None None

*= If sample concentration >MDL but < Reporting limit, then sample result qualified as non-detect (U). If sample concentration greater than the reporting limit but less than 10x blank, then sample results qualified (E). If sample concentration greater than 10x the blank results or sample was not detected then no qualifications or action is required.

- Method Blank (Batch #: GP60775/GN56194) associated with the filtered water samples was analyzed on 09/30/2011.

Laboratory Sample ID	Analyte	Results (mg/l)	Reporting Limit* (mg/l)	Sample(s) Affected	Action
GP60775-MB1	DOC	0.60	1.0	CDEOU4-SWF-BB-RM7.35 CDEOU4-SWF-BB-RM7.68, CDEOU4-SWF-BB-RM8.3, CDEOU4-SWF-BB-TRIB-SPRING	None None None

*= If sample concentration >MDL but < Reporting limit, then sample result qualified as non-detect (U). If sample concentration greater than the reporting limit but less than 10x blank, then sample results qualified (E). If sample concentration greater than 10x the blank results or sample was not detected then no qualifications or action is required.

- Rinsate Blank (CDEOU4-20110921F-RINSATE) (JA86986-41F) associated with this SDG was free of contamination. No qualifications were required.

Laboratory Control Sample (LCS) /Laboratory Control Sample Duplicate (LCSD):

- Laboratory Control Sample (LCS) associated with Batch #: GP60766/GN56194 analyzed on 09/30/2011 recovered within the laboratory control limits (90-110%). No qualifications were required.
- Laboratory Control Sample (LCS) associated with Batch #: GP60775/GN56194 analyzed on 09/30/2011 recovered within the laboratory control limits (90-110%). No qualifications were required.

Field Duplicate:

- Sample CDEOU4-SWF-BB-HRM2.2 (JA86986-26F) was collected as field duplicate for sample CDEOU4-SWF-BB-RM2.2 (JA86986-32F). DOC RPD was $\leq 35\%$. No qualifications were required.

Field Sample	Analyte	Analytical Method	Result	Units	Field Duplicate	Result	Units	RPD	Qualifier
CDEOU4-SWF-BB-RM2.2	DOC	SM20 5310B	3.8	mg/l	CDEOU4-SWF-BB-HRM2.2	3.7	mg/l	2.7	None

Laboratory Duplicate:

1. RPD was calculated from MS and MSD.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD):

1. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were performed on sample CDEOU4-SWF-BB-RM0.4 (JA86986-29F) (Batch #:GP60766/GN56194). DOC %REC's and RPD were within the QAPP control limits (%Rec: 75-125%, RPD: ≤20%). No qualifications were required.
2. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were performed on sample CDEOU4-SWF-BB-RM2.2 (JA86986-32F) (Batch #:GP60766/GN56194). DOC %REC's and RPD were within the QAPP control limits (%Rec: 75-125%, RPD: ≤20%). No qualifications were required.
3. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were performed on sample CDEOU4-SWF-TRIB-SPRING (JA86986-62F) (Batch #:GP60755/GN56194). DOC %REC's and RPD were within the QAPP control limits (%Rec: 75-125%, RPD: ≤20%). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. All sample results were reported within the linear calibration range. No qualifications were required.
2. Calculation:

Dissolved Organic Carbon (mg/l)= Conc. From Curve

INITIAL CALIBRATION WORKSHEET

Initial Calibration

Date: 9/29/2011

Analyte: TOC/DOC

Units: mg/l

Measured	Actual	Calculated	% Diff	Calculated	% Diff
1.636	0	0.0	#DIV/0!	-0.1	#DIV/0!
10.880	1	1.2	-17.7	1.1	-13.5
17.950	2	2.1	-3.7	2.1	-2.6
39.890	5	4.9	2.9	4.9	2.2
78.970	10	9.8	1.9	9.9	0.9
159.500	20	20.0	-0.1	20.1	-0.6
238.700	30	30.1	-0.2	30.0	0.1

LINEAR EQUATION

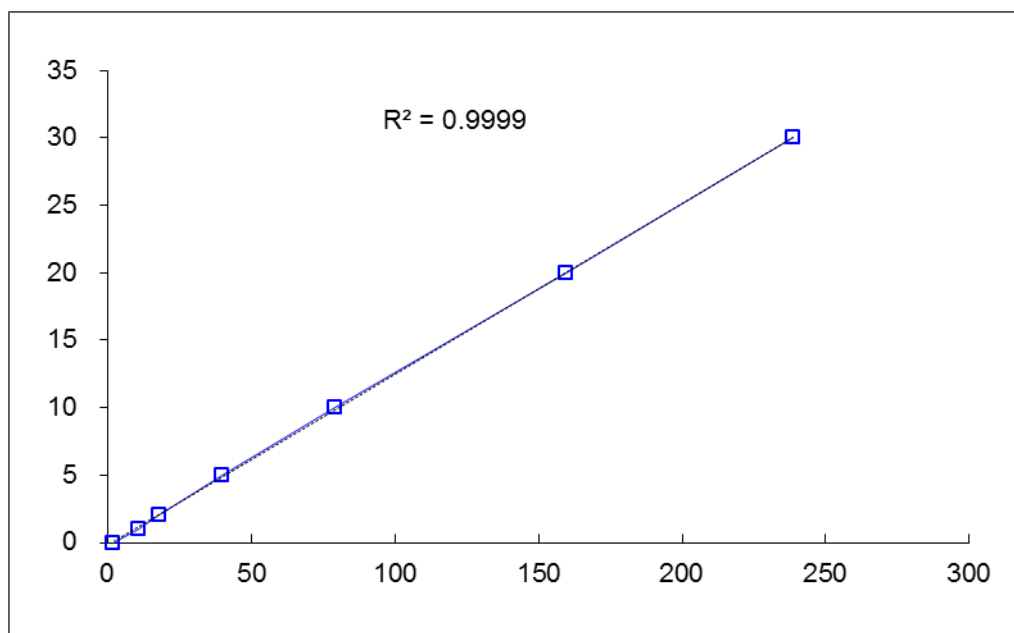
$$y=a+bx$$

a= -0.202
b= 1.268E-01
r= 0.99994

QUADRATIC EQUATION

$$y= a +bx +cx^2$$

a= -2.802E-01
b= 1.302E-01
c= -1.487E-05
r= 0.9999



2.1 Sample ID: CDEOU4-SPF-BB-RM2.8 (JA86986-2F)

Analyte	Mean Area	DF	Curve Conc. Linear (mg/l)	Laboratory (mg/l)	Validation (mg/l)	%D
DOC	58.20	1	7.176	7.2	7.2	0.0

2.2 Sample ID: CDEOU4-SWF-BB-RM7.35 (JA86986-53F)

Analyte	Mean Area	DF	Curve Conc. Linear (mg/l)	Laboratory (mg/l)	Validation (mg/l)	%D
DOC	112.0	1	13.997	14.0	14.0	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Sept. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: 02GZCO04

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA86986

Client: The Louis Berger Group, Inc.

Date: 03/12/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for twenty (20) water samples and one (1) rinsate blank analyzed for Total Organic Carbon (TOC) by SM20 5310B, SW-846 Method 9060M.
2. The samples were collected on 09/21/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 09/22/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 5310B “Total Organic Carbon, Combustion-Infrared Method”; Accutest Laboratories Standard Operating Procedure “Total Organic Carbon in Aqueous Samples”, EGN234-11, July 2010 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Total Organic Carbon data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-20110921W-RINSATE	JA86986-85	09/21/11	TOC	Water	Rinsate Blank
CDEOU4-SPW-BB-RM2.8	JA86986-86	09/21/11	TOC	Water	
CDEOU4-SPW-BB-RM5.75	JA86986-87	09/21/11	TOC	Water	
CDEOU4-SPW-BB-RM7.35	JA86986-88	09/21/11	TOC	Water	
CDEOU4-SWW-BB-HRM2.2	JA86986-89	09/21/11	TOC	Water	Field Duplicate of sample CDEOU4-SWW-BB-RM2.2
CDEOU4-SWW-BB-RM0.4	JA86986-90	09/21/11	TOC	Water	
CDEOU4-SWW-BB-RM2.2	JA86986-91	09/21/11	TOC	Water	
CDEOU4-SWW-BB-RM2.8	JA86986-92	09/21/11	TOC	Water	
CDEOU4-SWW-BB-RM3.4	JA86986-93	09/21/11	TOC	Water	
CDEOU4-SWW-BB-RM5.3	JA86986-94	09/21/11	TOC	Water	
CDEOU4-SWW-BB-RM6.0	JA86986-95	09/21/11	TOC	Water	
CDEOU4-SWW-BB-RM6.25	JA86986-96	09/21/11	TOC	Water	
CDEOU4-SWW-BB-RM6.8	JA86986-97	09/21/11	TOC	Water	
CDEOU4-SWW-BB-RM7.35	JA86986-98	09/21/11	TOC	Water	
CDEOU4-SWW-BB-RM7.68	JA86986-99	09/21/11	TOC	Water	
CDEOU4-SWW-BB-RM8.3	JA86986-100	09/21/11	TOC	Water	
CDEOU4-SWW-GB-DNBB	JA86986-101	09/21/11	TOC	Water	
CDEOU4-SWW-GB-UPBB	JA86986-102	09/21/11	TOC	Water	
CDEOU4-SWW-TRIB-ELISE	JA86986-103	09/21/11	TOC	Water	
CDEOU4-SWW-TRIB-NEWBRUN	JA86986-104	09/21/11	TOC	Water	
CDEOU4-SWW-TRIB-SPRING	JA86986-105	09/21/11	TOC	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within 28days from sample collection. No qualifications were required.

Initial Calibration:

1. Initial calibration curve analyzed on 09/29/2011 exhibited acceptable correlation coefficient >0.995. No qualifications were required.

Initial and Continuing Calibration Verification (ICV and CCV):

1. All ICV and CCVs %REC values were within the QC limits (90-110%). No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GP60763/GN56194) associated with the water sample was analyzed on 09/29/2011.

Laboratory Sample ID	Analyte	Results (mg/l)	Reporting Limit* (mg/l)	Sample(s) Affected	Action
GP60763-MB1	TOC	0.19	1.0	CDEOU4-SWW-TRIB-SPRING	None

*= If sample concentration >MDL but < Reporting limit, then sample result qualified as non-detect (U). If sample concentration greater than the reporting limit but less than 10x blank, then sample results qualified (E). If sample concentration greater than 10x the blank results or sample was not detected then no qualifications or action is required.

2. Method Blank (Batch #: GP60764/GN56194) associated with the water samples was analyzed on 09/29/2011.

Laboratory Sample ID	Analyte	Results (mg/l)	Reporting Limit* (mg/l)	Sample(s) Affected	Action
GP60764-MB1	TOC	0.24	1.0	CDEOU4-20110921W-RINSATE CDEOU4-SPW-BB-RM2.8, CDEOU4-SPW-BB-RM5.75 CDEOU4-SPW-BB-RM7.35, CDEOU4-SWW-BB-HRM2.2 CDEOU4-SWW-BB-RM0.4, CDEOU4-SWW-BB-RM2.2 CDEOU4-SWW-BB-RM2.8, CDEOU4-SWW-BB-RM3.4 CDEOU4-SWW-BB-RM5.3, CDEOU4-SWW-BB-RM6.0 CDEOU4-SWW-BB-RM6.25, CDEOU4-SWW-BB-RM6.8 CDEOU4-SWW-BB-RM7.3, CDEOU4-SWW-BB-RM7.68 CDEOU4-SWW-BB-RM8.3, CDEOU4-SWW-GB-DNBB CDEOU4-SWW-GB-UPBB, CDEOU4-SWW-TRIB-ELISE CDEOU4-SWW-TRIB-NEWBRUN	U None None None None None None None None None None

*= If sample concentration >MDL but < Reporting limit, then sample result qualified as non-detect (U). If sample concentration greater than the reporting limit but less than 10x blank, then sample results qualified (E). If sample concentration greater than 10x the blank results or sample was not detected then no qualifications or action is required.

3. Rinsate Blank (CDEOU4-20110921W-RINSATE) (JA86986-85) associated with this SDG was free of contamination. No qualifications were required.

Laboratory Control Sample (LCS) /Laboratory Control Sample Duplicate (LCSD):

- Laboratory Control Sample (LCS) associated with Batch #: GP60763/GN56194 analyzed on 09/29/2011 recovered within the laboratory control limits (90-110%). No qualifications were required.
- Laboratory Control Sample (LCS) associated with Batch #: GP60764/GN56194 analyzed on 09/29/2011 recovered within the laboratory control limits (90-110%). No qualifications were required.

Field Duplicate:

- Sample CDEOU4-SWW-BB-HRM2.2 (JA86986-89) was collected as field duplicate for sample CDEOU4-SWW-BB-RM2.2 (JA86986-91). TOC RPD was $\leq 35\%$. No qualifications were required.

Field Sample	Analyte	Analytical Method	Result	Units	Field Duplicate	Result	Units	RPD	Qualifier
CDEOU4-SWW-BB-RM2.2	TOC	SM20 5310B	3.8	mg/l	CDEOU4-SWW-BB-HRM2.2	3.9	mg/l	2.6	None

Laboratory Duplicate:

1. RPD was calculated from MS and MSD.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD):

1. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were performed on sample CDEOU4-SWW-TRIB-SPRING (JA86986-105) (Batch #:GP60763/GN56194). TOC %REC's and RPD were within the QAPP control limits (%Rec: 75-125%, RPD: $\leq 20\%$). No qualifications were required.
2. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were performed on sample CDEOU4-SWW-BB-RM0.4 (JA86986-90) (Batch #:GP60764/GN56194). TOC %REC's and RPD were within the QAPP control limits (%Rec: 75-125%, RPD: $\leq 20\%$). No qualifications were required.
3. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were performed on sample CDEOU4-SWW-BB-RM6.0 (JA86986-95) (Batch #:GP60764/GN56194). TOC %REC's and RPD were within the QAPP control limits (%Rec: 75-125%, RPD: $\leq 20\%$). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. All sample results were reported within the linear calibration range. No qualifications were required.
2. Calculation:

Total Organic Carbon (mg/l) = Conc. From Curve

INITIAL CALIBRATION WORKSHEET

Initial Calibration

Date: 9/29/2011

Analyte: TOC/DOC

Units: mg/l

Measured	Actual	Calculated	% Diff	Calculated	% Diff
1.636	0	0.0	#DIV/0!	-0.1	#DIV/0!
10.880	1	1.2	-17.7	1.1	-13.5
17.950	2	2.1	-3.7	2.1	-2.6
39.890	5	4.9	2.9	4.9	2.2
78.970	10	9.8	1.9	9.9	0.9
159.500	20	20.0	-0.1	20.1	-0.6
238.700	30	30.1	-0.2	30.0	0.1

LINEAR EQUATION

$$y=a+bx$$

a= -0.202

b= 1.268E-01

r= 0.99994

QUADRATIC EQUATION

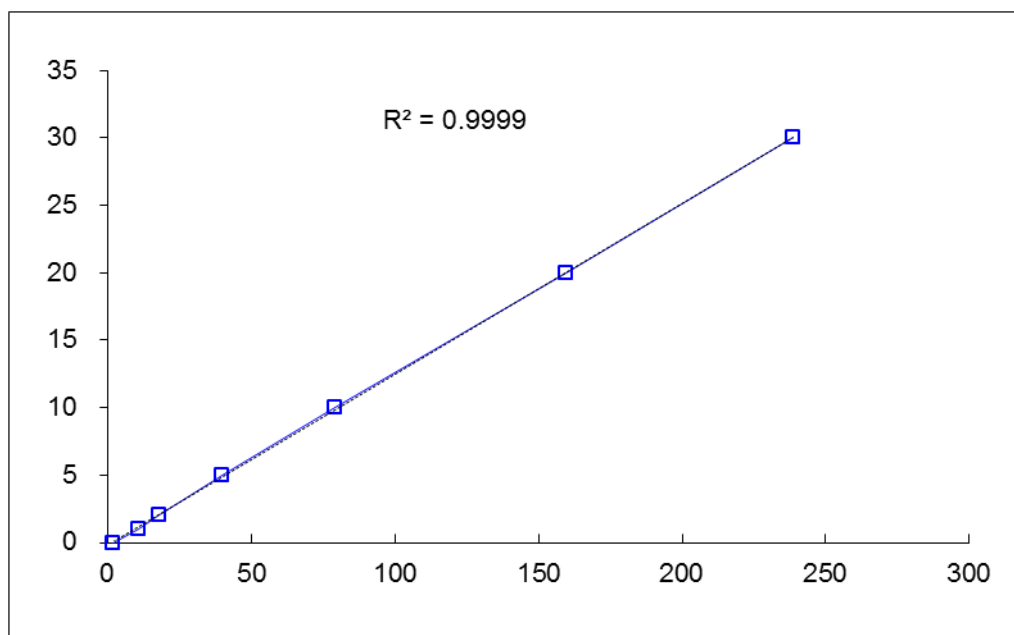
$$y= a +bx +cx^2$$

a= -2.802E-01

b= 1.302E-01

c= -1.487E-05

r= 0.9999



2.1 Sample ID: CDEOU4-SPW-BB-RM2.8 (JA86986-86)

Analyte	Mean Area	DF	Curve Conc. Linear (mg/l)	Laboratory (mg/l)	Validation (mg/l)	%D
TOC	62.34	1	7.701	7.7	7.7	0.0

2.2 Sample ID: CDEOU4-SWW-BB-TRIB-NEWBRUN (JA86986-104)

Analyte	Mean Area	DF	Curve Conc. Linear (mg/l)	Laboratory (mg/l)	Validation (mg/l)	%D
TOC	41.68	1	5.082	5.1	5.1	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Sept. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: 02GZCO04

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA86986

Client: The Louis Berger Group, Inc.

Date: 03/13/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for eighteen (18) water samples and one (1) rinsate blank analyzed for Hardness, Total as CaCO₃ by SM19 2340C.
2. The samples were collected on 09/21/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 09/22/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 19th Edition, Method 2340C “Hardness as CaCO₃ by Titration”; Accutest Laboratories Standard Operating Procedure “Hardness as CaCO₃ by Titration”, EGN101-06, May 2006 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Hardness data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-20110921W-RINSATE	JA86986-106	09/21/11	Hardness	Water	Rinsate Blank
CDEOU4-SPW-BB-RM2.8	JA86986-107	09/21/11	Hardness	Water	
CDEOU4-SPW-BB-RM5.75	JA86986-108	09/21/11	Hardness	Water	
CDEOU4-SPW-BB-RM7.35	JA86986-109	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-HRM2.2	JA86986-110	09/21/11	Hardness	Water	Field Duplicate of sample CDEOU4-SWW-BB-RM2.2
CDEOU4-SWW-BB-RM0.4	JA86986-111	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-RM2.2	JA86986-112	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-RM2.8	JA86986-113	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-RM3.4	JA86986-114	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-RM5.3	JA86986-115	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-RM6.0	JA86986-116	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-RM6.25	JA86986-117	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-RM6.8	JA86986-118	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-RM7.35	JA86986-119	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-RM7.68	JA86986-120	09/21/11	Hardness	Water	
CDEOU4-SWW-BB-RM8.3	JA86986-121	09/21/11	Hardness	Water	
CDEOU4-SWW-GB-DNBB	JA86986-122	09/21/11	Hardness	Water	
CDEOU4-SWW-GB-UPBB	JA86986-123	09/21/11	Hardness	Water	
CDEOU4-SWW-TRIB-SPRING	JA86986-124	09/21/11	Hardness	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within six months from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN56470) associated with the water samples analyzed on 10/06/2011 was free of contamination. No qualifications were required.
2. Rinsate Blank (CDEOU4-20110921W-RINSATE) (JA86986-106) associated with this SDG was free of contamination. No qualifications were required.

Laboratory Control Sample (LCS) /Laboratory Control Sample Duplicate (LCSD):

1. Laboratory Control Sample (LCS) associated with Batch #: GN56470 analyzed on 10/06/2011 recovered within the laboratory control limits (80-120%). No qualifications were required.

Field Duplicate:

1. Sample CDEOU4-SWW-BB-HRM2.2 (JA86986-110) was collected as field duplicate for sample CDEOU4-SWW-BB-RM2.2 (JA86986-112). Hardness RPD was $\leq 30\%$. No qualifications were required.

Field Sample	Analyte	Analytical Method	Result	Units	Field Duplicate	Result	Units	RPD	Qualifier
CDEOU4-SWW-BB-RM2.2	Hardness, Total as CaCO ₃	SM19 2340C	142	mg/l	CDEOU4-SWW-BB-HRM2.2	155	mg/l	9	None

Laboratory Duplicate:

1. Laboratory Duplicate for Hardness was performed on sample CDEOU4-SWW-BB-RM0.4 (JA86986-111) (Batch #:GN56470). RPD was 5.5% within the laboratory control limit ($\leq 10\%$). No qualifications were required.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD):

1. Matrix Spike (MS) was performed on CDEOU4-SWW-BB-RM0.4 (JA86986-111) (Batch #:GN56470). Hardness %REC was within the QAPP control limits (%Rec: 75-125%). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.

2. Calculation:

$$\text{Hardness as mg CaCO}_3/\text{liter} = (A \times N \times 50000) / (\text{ml sample})$$

Where

A= ml of EDTA titrant

N= normality of EDTA titrant

2.1 Sample ID: CDEOU4-SPW-BB-RM2.8 (JA86986-107)

Sample Volume (ml): 25

A= 4.05ml

N= 0.0187

Final Result: 151.47mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
Hardness, Total as CaCO ₃	151	151	0.0

2.2 Sample ID: CDEOU4-SWW-GB-DNBB (JA86986-122)

Sample Volume (ml): 25

A= 3.50ml

N= 0.0187

Final Result: 130.9mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
Hardness, Total as CaCO ₃	131	131	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Sept. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: 02GZCO04

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA86986

Client: The Louis Berger Group, Inc.

Date: 03/13/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for twenty (20) water samples and one (1) rinsate blank analyzed for Solids, Total Dissolved (TDS) by SM20 2540C.
2. The samples were collected on 09/21/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 09/22/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540C “Total Dissolved Solids, Gravimetric, Dried at 180°C”; Accutest Laboratories Standard Operating Procedure “Total Dissolved Solids (Total Filterable Residue)”, EGN020-10, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Dissolved data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SPF-BB-RM5.75	JA86986-64	09/21/11	TDS	Water	
CDEOU4-SWF-BB-HRM2.2	JA86986-65	09/21/11	TDS	Water	Field Duplicate of sample CDEOU4-SWF-BB-RM2.2
CDEOU4-SWF-BB-RM0.4	JA86986-66	09/21/11	TDS	Water	
CDEOU4-SWF-BB-RM2.2	JA86986-67	09/21/11	TDS	Water	
CDEOU4-SWF-BB-RM6.0	JA86986-68	09/21/11	TDS	Water	
CDEOU4-SWF-BB-RM6.25	JA86986-69	09/21/11	TDS	Water	
CDEOU4-SWF-GB-DNBB	JA86986-70	09/21/11	TDS	Water	
CDEOU4-SWF-GB-UPBB	JA86986-71	09/21/11	TDS	Water	
CDEOU4-SWF-TRIB-SPRING	JA86986-72	09/21/11	TDS	Water	
CDEOU4-20110921F-RINSATE	JA86986-73	09/21/11	TDS	Water	Rinsate Blank
CDEOU4-SPF-BB-RM2.8	JA86986-74	09/21/11	TDS	Water	
CDEOU4-SPF-BB-RM7.35	JA86986-75	09/21/11	TDS	Water	
CDEOU4-SWF-BB-RM2.8	JA86986-76	09/21/11	TDS	Water	
CDEOU4-SWF-BB-RM3.4	JA86986-77	09/21/11	TDS	Water	
CDEOU4-SWF-BB-RM5.3	JA86986-78	09/21/11	TDS	Water	
CDEOU4-SWF-BB-RM6.8	JA86986-79	09/21/11	TDS	Water	
CDEOU4-SWF-BB-RM7.35	JA86986-80	09/21/11	TDS	Water	
CDEOU4-SWF-BB-RM7.68	JA86986-81	09/21/11	TDS	Water	
CDEOU4-SWF-BB-RM8.3	JA86986-82	09/21/11	TDS	Water	
CDEOU4-SWF-TRIB-ELSIE	JA86986-83	09/21/11	TDS	Water	
CDEOU4-SWF-TRIB-NEWBRUN	JA86986-84	09/21/11	TDS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN56088) associated with the water samples analyzed on 09/27/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN56107) associated with the water samples analyzed on 09/28/2011 was free of contamination. No qualifications were required.
3. Rinsate Blank (CDEOU4-20110921F-RINSATE) (JA86986-73) associated with this SDG was free of contamination. No qualifications were required.

Field Duplicate:

1. Sample CDEOU4-SWF-BB-HRM2.2 (JA86986-65) was collected as field duplicate for sample CDEOU4-SWF-BB-RM2.2 (JA86986-67). TDS RPD was $\leq 30\%$. No qualifications were required.

Field Sample	Analyte	Analytical Method	Result	Units	Field Duplicate	Result	Units	RPD	Qualifier
CDEOU4-SWF-BB-RM2.2	TDS	SM19 2340C	328	mg/l	CDEOU4-SWF-BB-HRM2.2	329	mg/l	0.3	None

Laboratory Duplicate:

1. Laboratory Duplicate for TDS was performed on sample CDEOU4-SPF-BB-RM5.75 (JA86986-64) (Batch #:GN56088). RPD was 3.2% within the laboratory control limit ($\leq 20\%$). No qualifications were required.
2. Laboratory Duplicate for TDS was performed on sample CDEOU4-SPF-BB-RM2.8 (JA86986-74) (Batch #:GN56107). RPD was 2.7% within the laboratory control limit ($\leq 20\%$). No qualifications were required.
3. Laboratory Duplicate for TDS was performed on sample CDEOU4-SPF-BB-RM7.35 (JA86986-75) (Batch #:GN56107). RPD was 0.7% within the laboratory control limit ($\leq 20\%$). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TDS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

2.1 Sample ID: CDEOU4-SPF-BB-RM5.75 (JA86986-64)

Sample Volume (ml): 100

A= 80.84240g

B= 80.80100g

Final Result: 414.00mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TDS	414	414	0.0

2.2 Sample ID: CDEOU4-SWF-BB-RM8.3 (JA86986-82)

Sample Volume (ml): 100

A= 75.89650g

B= 75.85310g

Final Result: 434.00mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TDS	434	434	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Sept. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: 02GZCO04

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA86986

Client: The Louis Berger Group, Inc.

Date: 03/14/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for twenty (20) water samples and one (1) rinsate blank analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 09/21/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 09/22/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SPF-BB-RM5.75	JA86986-64	09/21/11	TSS	Water	
CDEOU4-SWF-BB-HRM2.2	JA86986-65	09/21/11	TSS	Water	Field Duplicate of sample CDEOU4-SWF-BB-RM2.2
CDEOU4-SWF-BB-RM0.4	JA86986-66	09/21/11	TSS	Water	
CDEOU4-SWF-BB-RM2.2	JA86986-67	09/21/11	TSS	Water	
CDEOU4-SWF-BB-RM6.0	JA86986-68	09/21/11	TSS	Water	
CDEOU4-SWF-BB-RM6.25	JA86986-69	09/21/11	TSS	Water	
CDEOU4-SWF-GB-DNBB	JA86986-70	09/21/11	TSS	Water	
CDEOU4-SWF-GB-UPBB	JA86986-71	09/21/11	TSS	Water	
CDEOU4-SWF-TRIB-SPRING	JA86986-72	09/21/11	TSS	Water	
CDEOU4-20110921F-RINSATE	JA86986-73	09/21/11	TSS	Water	Rinsate Blank
CDEOU4-SPF-BB-RM2.8	JA86986-74	09/21/11	TSS	Water	
CDEOU4-SPF-BB-RM7.35	JA86986-75	09/21/11	TSS	Water	
CDEOU4-SWF-BB-RM2.8	JA86986-76	09/21/11	TSS	Water	
CDEOU4-SWF-BB-RM3.4	JA86986-77	09/21/11	TSS	Water	
CDEOU4-SWF-BB-RM5.3	JA86986-78	09/21/11	TSS	Water	
CDEOU4-SWF-BB-RM6.8	JA86986-79	09/21/11	TSS	Water	
CDEOU4-SWF-BB-RM7.35	JA86986-80	09/21/11	TSS	Water	
CDEOU4-SWF-BB-RM7.68	JA86986-81	09/21/11	TSS	Water	
CDEOU4-SWF-BB-RM8.3	JA86986-82	09/21/11	TSS	Water	
CDEOU4-SWF-TRIB-ELSIE	JA86986-83	09/21/11	TSS	Water	
CDEOU4-SWF-TRIB-NEWBRUN	JA86986-84	09/21/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN56087) associated with the water samples analyzed on 09/27/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN56108) associated with the water samples analyzed on 09/28/2011 was free of contamination. No qualifications were required.
3. Rinsate Blank (CDEOU4-20110921F-RINSATE) (JA86986-73) associated with this SDG was free of contamination. No qualifications were required.

Field Duplicate:

1. Sample CDEOU4-SWF-BB-HRM2.2 (JA86986-65) was collected as field duplicate for sample CDEOU4-SWF-BB-RM2.2 (JA86986-67). Both samples were reported as non-detects. No qualifications were required.

Laboratory Duplicate:

1. Laboratory Duplicate for TSS was performed on sample CDEOU4-SPF-BB-RM5.75 (JA86986-64) (Batch #:GN56087). Both samples were reported as non-detects. No qualifications were required.
2. Laboratory Duplicate for TSS was performed on sample CDEOU4-SPF-BB-RM2.8 (JA86986-74) (Batch #:GN56108). RPD was 3.2% within the laboratory control limit ($\leq 20\%$). No qualifications were required.
3. Laboratory Duplicate for TSS was performed on sample CDEOU4-SPF-BB-RM7.35 (JA86986-75) (Batch #:GN56108). RPD was 5.0% within the laboratory control limit ($\leq 20\%$). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(\text{A}-\text{B}) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

2.1 Sample ID: CDEOU4-SPF-BB-RM2.8 (JA86986-74)

Sample Volume (ml): 100

A= 0.15840 g

B= 0.14880 g

Final Result: 96.0 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	96.0	96.0	0.0

2.2 Sample ID: CDEOU4-SWF-BB-RM7.35 (JA86986-80)

Sample Volume (ml): 100

A= 0.14960g

B= 0.14910g

Final Result: 5.0 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	5.0	5.0	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Sept. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: OU4 Bound Brook

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA94371

Client: The Louis Berger Group, Inc.

Date: 03/15/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM2.2-120811-0240	JA94371-1	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM2.2-120811-0325	JA94371-2	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM2.2-120811-0506	JA94371-3	12/08/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59265-MB2) associated with the water samples analyzed on 12/13/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate source sample was associated with a different SDG.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result 1}^{\text{st}}) + (\text{Vol. x Result 2}^{\text{nd}})}{(\text{Vol. 1}^{\text{st}}) + (\text{Vol. 2}^{\text{nd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM2.2-120811-0240 (JA94371-1)

1st run:

Sample Volume (ml): 500

A= 0.13750 g

B= 0.11860 g

Result: 37.60 mg/l

2nd run:

Sample Volume (ml): 500

A= 0.14140 g

B= 0.11890 g

Result: 45.00 mg/l

Final Result: 41.3 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	41.3	41.3	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site
Site#: OU4 Bound Brook
Location: South Plainfield, New Jersey
Project Number: 3715-001
SDG #: JA94372
Client: The Louis Berger Group, Inc.
Date: 03/15/2012
Laboratory: Accutest Laboratories, New Jersey
Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/07 and 08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM6.8-120711-2200	JA94372-1	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM6.8-120811-0000	JA94372-2	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM6.8-120811-0120	JA94372-3	12/08/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59265-MB1) associated with the water samples analyzed on 12/12/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN59330-MB1) associated with the water samples analyzed on 12/13/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate source sample was associated with a different SDG.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}}) + (\text{Vol. x Result } 3^{\text{rd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}}) + (\text{Vol. } 3^{\text{rd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM6.8-120811-0000 (JA94372-2)

1st run:

Sample Volume (ml): 400

A= 0.15590 g

B= 0.12470 g

Result: 78.0 mg/l

2nd run:

Sample Volume (ml): 300

A= 0.14790 g

B= 0.12410 g

Result: 79.33 mg/l

3rd run:

Sample Volume (ml): 300

A= 0.14310 g

B= 0.12000 g

Result: 77.0 mg/l

Final Result: 78.1 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	78.1	78.1	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: OU4 Bound Brook

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA94373

Client: The Louis Berger Group, Inc.

Date: 03/16/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/07/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM6.8-120711-0951	JA94373-1	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM6.8-120711-1735	JA94373-2	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM6.8-120711-1945	JA94373-3	12/07/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59265-MB2) associated with the water samples analyzed on 12/13/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate source sample was associated with a different SDG.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}}) + (\text{Vol. x Result } 3^{\text{rd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}}) + (\text{Vol. } 3^{\text{rd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM6.8-120711-1945 (JA94373-3)

1st run:

Sample Volume (ml): 400

A= 0.13980 g

B= 0.12450 g

Result: 38.25 mg/l

2nd run:

Sample Volume (ml): 300

A= 0.13920 g

B= 0.12620 g

Result: 43.67 mg/l

3rd run:

Sample Volume (ml): 300

A= 0.13760 g

B= 0.12430 g

Result: 44.33 mg/l

Final Result: 41.7 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	41.7	41.7	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site
Site#: OU4 Bound Brook
Location: South Plainfield, New Jersey
Project Number: 3715-001
SDG #: JA94374
Client: The Louis Berger Group, Inc.
Date: 03/16/2012
Laboratory: Accutest Laboratories, New Jersey
Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM0.4-120811-0300	JA94374-1	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM0.4-120811-0445	JA94374-2	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM0.4-120811-0600	JA94374-3	12/08/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59330-MB1) associated with the water samples analyzed on 12/13/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN59330-MB2) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate source sample was associated with a different SDG.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result 1}^{\text{st}}) + (\text{Vol. x Result 2}^{\text{nd}})}{(\text{Vol. 1}^{\text{st}}) + (\text{Vol. 2}^{\text{nd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM0.4-120811-0300 (JA94374-1)

1st run:

Sample Volume (ml): 500

A= 0.14040 g

B= 0.12140 g

Result: 38.0 mg/l

2nd run:

Sample Volume (ml): 500

A= 0.13730 g

B= 0.11980 g

Result: 35.0 mg/l

Final Result (Average): 36.5 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	36.5	36.5	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site
Site#: OU4 Bound Brook
Location: South Plainfield, New Jersey
Project Number: 3715-001
SDG #: JA94375
Client: The Louis Berger Group, Inc.
Date: 03/16/2012
Laboratory: Accutest Laboratories, New Jersey
Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/07 and 08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM0.4-120711-2155	JA94375-1	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM0.4-120811-0005	JA94375-2	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM0.4-120811-0200	JA94375-3	12/08/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59265-MB2) associated with the water samples analyzed on 12/13/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN59330-MB2) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate for TSS was performed on sample CDEOU4-SWF-BB-RM0.4-120811-0005 (JA94375-2) (Batch #:GN59330). RPD was 0.4% within the laboratory control limit ($\leq 20\%$). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}}) + (\text{Vol. x Result } 3^{\text{rd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}}) + (\text{Vol. } 3^{\text{rd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM0.4-120811-0005 (JA94375-2)

1st run:

Sample Volume (ml): 400

A= 0.13740 g

B= 0.11640 g

Result: 52.50 mg/l

2nd run:

Sample Volume (ml): 300

A= 0.13500 g

B= 0.11910 g

Result: 53.0 mg/l

3rd run:

Sample Volume (ml): 300

A= 0.16270 g

B= 0.14630 g

Result: 54.67 mg/l

Final Result: 53.3 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	53.3	53.3	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site
Site#: OU4 Bound Brook
Location: South Plainfield, New Jersey
Project Number: 3715-001
SDG #: JA94376
Client: The Louis Berger Group, Inc.
Date: 03/19/2012
Laboratory: Accutest Laboratories, New Jersey
Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/07 and 08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-HRM0.4-120811-0200	JA94376-1	12/08/11	TSS	Water	Field Duplicate of sample CDEOU4-SWF-BB-RM0.4-120811-0200 (SDG: JA94375)
CDEOU4-SWF-BB-RM0.4-120711-1618	JA94376-2	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM0.4-120711-2000	JA94376-3	12/07/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59265-MB2) associated with the water samples analyzed on 12/13/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN59330-MB2) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. Sample CDEOU4-SWF-BB-HRM0.4-120811-0200 (JA94376-1) was collected as field duplicate for sample CDEOU4-SWF-BB-RM0.4-120811-0.200 (JA94375-3). TSS RPD was $\leq 30\%$. No qualifications were required.

Field Sample	Analyte	Analytical Method	Result	Units	Field Duplicate	Result	Units	RPD	Qualifier
CDEOU4-SWF-BB-RM0.4-120811-0.200	Solids, Total Suspended	SM20 2540D	46.5	mg/l	CDEOU4-SWF-BB-HRM0.4-120811-0200	47.4	mg/l	1.9	None

Laboratory Duplicate:

1. Laboratory Duplicate for TSS was performed on sample CDEOU4-SWF-BB-HRM0.4-120811-0200 (JA94376-1) (Batch #:GN59330). RPD was 2.9% within the laboratory control limit ($\leq 20\%$). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}}) + (\text{Vol. x Result } 3^{\text{rd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}}) + (\text{Vol. } 3^{\text{rd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-HRM0.4-120811-0200 (JA94376-1)

1st run:

Sample Volume (ml): 400

A= 0.16460 g

B= 0.14660 g

Result: 45.00 mg/l

2nd run:

Sample Volume (ml): 400

A= 0.16540 g

B= 0.14650 g

Result: 47.25 mg/l

3rd run:

Sample Volume (ml): 200

A= 0.15820 g

B= 0.14770 g

Result: 52.50 mg/l

Final Result: 47.4 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	47.4	47.4	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site
Site#: OU4 Bound Brook
Location: South Plainfield, New Jersey
Project Number: 3715-001
SDG #: JA94377
Client: The Louis Berger Group, Inc.
Date: 03/19/2012
Laboratory: Accutest Laboratories, New Jersey
Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for one (1) water sample and one (1) equipment blank analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/07 and 09/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM6.8-120811-0600	JA94377-1	12/07/11	TSS	Water	
CDEOU4-SWF-EQBLANK-120911	JA94377-3	12/09/11	TSS	Water	Equipment Blank

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59265-MB2) associated with the water samples analyzed on 12/13/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN59367-MB1) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.
3. Equipment Blank (CDEOU4-SWF-EQBLANK-120911) (JA94377-2) associated with this SDG was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate source sample was associated with a different SDG.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}}) + (\text{Vol. x Result } 3^{\text{rd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}}) + (\text{Vol. } 3^{\text{rd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM6.8-120811-0600 (JA94377-1)

1st run:

Sample Volume (ml): 500

A= 0.13980 g

B= 0.12260 g

Result: 34.40 mg/l

2nd run:

Sample Volume (ml): 300

A= 0.13360 g

B= 0.12350 g

Result: 33.67 mg/l

3rd run:

Sample Volume (ml): 200

A= 0.11920 g

B= 0.11260 g

Result: 33.00 mg/l

Final Result: 33.9 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	33.9	33.9	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: OU4 Bound Brook

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA94378

Client: The Louis Berger Group, Inc.

Date: 03/20/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/07 and 08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM5.3-120711-2040	JA94378-1	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM5.3-120711-2220	JA94378-2	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM5.3-120811-0030	JA94378-3	12/08/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59265-MB2) associated with the water samples analyzed on 12/13/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN59330-MB2) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate source sample was associated with a different SDG.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result 1}^{\text{st}}) + (\text{Vol. x Result 2}^{\text{nd}})}{(\text{Vol. 1}^{\text{st}}) + (\text{Vol. 2}^{\text{nd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM5.3-120711-2040 (JA94378-1)

1st run:

Sample Volume (ml): 500

A= 0.14170 g

B= 0.11870 g

Result: 44.00 mg/l

2nd run:

Sample Volume (ml): 500

A= 0.14650 g

B= 0.12280 g

Result: 47.40 mg/l

Final Result: 45.7 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	45.7	45.7	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: OU4 Bound Brook

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA94379

Client: The Louis Berger Group, Inc.

Date: 03/20/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM6.8-120811-0205	JA94379-1	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM6.8-120811-0305	JA94379-2	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM6.8-120811-0405	JA94379-3	12/08/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59330-MB2) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN59367-MB1) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate for TSS was performed on sample CDEOU4-SWF-BB-RM6.8-120811-0405 (JA94379-3) (Batch #:GN59367). RPD was 10.6% within the laboratory control limit ($\leq 20\%$). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}}) + (\text{Vol. x Result } 3^{\text{rd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}}) + (\text{Vol. } 3^{\text{rd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM6.8-120811-0305 (JA94379-2)

1st run:

Sample Volume (ml): 400

A= 0.13880 g

B= 0.12280 g

Result: 40.00 mg/l

2nd run:

Sample Volume (ml): 300

A= 0.13570 g

B= 0.12320 g

Result: 41.67 mg/l

3rd run:

Sample Volume (ml): 300

A= 0.13260 g

B= 0.11990 g

Result: 42.33 mg/l

Final Result: 41.2 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	41.2	41.2	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site
Site#: OU4 Bound Brook
Location: South Plainfield, New Jersey
Project Number: 3715-001
SDG #: JA94380
Client: The Louis Berger Group, Inc.
Date: 03/21/2012
Laboratory: Accutest Laboratories, New Jersey
Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/07/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM0.4-120711-1103	JA94380-1	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM2.2-120711-1047	JA94380-2	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM2.2-120711-1645	JA94380-3	12/07/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59265-MB1) associated with the water samples analyzed on 12/12/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN59265-MB2) associated with the water samples analyzed on 12/13/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate for TSS was performed on sample CDEOU4-SWF-BB-RM2.2-120711-1047 (JA94380-2) (Batch #:GN59265). RPD was 4.3% within the laboratory control limit ($\leq 20\%$). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM2.2-120711-1645 (JA94380-3)

1st run:

Sample Volume (ml): 500

A= 0.12330 g

B= 0.11440 g

Result: 17.80 mg/l

2nd run:

Sample Volume (ml): 500

A= 0.12210 g

B= 0.11320 g

Result: 17.80 mg/l

Final Result: 17.8 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	17.8	17.8	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site
Site#: OU4 Bound Brook
Location: South Plainfield, New Jersey
Project Number: 3715-001
SDG #: JA94381
Client: The Louis Berger Group, Inc.
Date: 03/21/2012
Laboratory: Accutest Laboratories, New Jersey
Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-HRM6.8-120811-0210	JA94381-1	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM5.3-120811-0430	JA94381-2	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM5.3-120811-0630	JA94381-3	12/08/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59330-MB2) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate source sample was associated with a different SDG.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}}) + (\text{Vol. x Result } 3^{\text{rd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}}) + (\text{Vol. } 3^{\text{rd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-HRM6.8-120811-0210 (JA94381-1)

1st run:

Sample Volume (ml): 400

A= 0.13940 g

B= 0.12000 g

Result: 48.50 mg/l

2nd run:

Sample Volume (ml): 300

A= 0.13670 g

B= 0.12160 g

Result: 50.33 mg/l

3rd run:

Sample Volume (ml): 300

A= 0.13870 g

B= 0.12380 g

Result: 49.67 mg/l

Final Result: 49.4 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	49.4	49.4	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site
Site#: OU4 Bound Brook
Location: South Plainfield, New Jersey
Project Number: 3715-001
SDG #: JA94382
Client: The Louis Berger Group, Inc.
Date: 03/21/2012
Laboratory: Accutest Laboratories, New Jersey
Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/07 and 08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM2.2-120711-2030	JA94382-1	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM2.2-120711-2213	JA94382-2	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM2.2-120811-0125	JA94382-3	12/08/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59265-MB2) associated with the water samples analyzed on 12/13/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN59330-MB2) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate source sample was associated with a different SDG.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}}) + (\text{Vol. x Result } 3^{\text{rd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}}) + (\text{Vol. } 3^{\text{rd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM2.2-120811-0125 (JA94382-3)

1st run:

Sample Volume (ml): 400

A= 0.13900 g

B= 0.12160 g

Result: 48.50 mg/l

2nd run:

Sample Volume (ml): 300

A= 0.13930 g

B= 0.12460 g

Result: 49.00 mg/l

3rd run:

Sample Volume (ml): 300

A= 0.13790 g

B= 0.12320 g

Result: 49.00 mg/l

Final Result: 46.8 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	46.8	46.8	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: OU4 Bound Brook

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA94383

Client: The Louis Berger Group, Inc.

Date: 03/21/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/07 and 08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM2.2-120811-0610	JA94383-1	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM5.3-120711-1028	JA94383-2	12/07/11	TSS	Water	
CDEOU4-SWF-BB-RM5.3-120711-1710	JA94383-3	12/07/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59265-MB1) associated with the water samples analyzed on 12/12/2011 was free of contamination. No qualifications were required.
2. Method Blank (Batch #: GN59330-MB2) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate for TSS was performed on sample CDEOU4-SWF-BB-RM5.3-120711-1710 (JA94383-3) (Batch #:GN59265). RPD was 6.9% within the laboratory control limit ($\leq 20\%$). No qualifications were required.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM5.3-120711-1710 (JA94383-3)

1st run:

Sample Volume (ml): 530

A= 0.14560 g

B= 0.12400 g

Result: 40.75 mg/l

2nd run:

Sample Volume (ml): 470

A= 0.14280 g

B= 0.12430 g

Result: 39.36 mg/l

Final Result: 40.1 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	40.1	40.1	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).

GENERAL CHEMISTRY
USEPA Region II – Data Validation

Project Name: Cornell-Dubilier Electronics Superfund Site

Site#: OU4 Bound Brook

Location: South Plainfield, New Jersey

Project Number: 3715-001

SDG #: JA94384

Client: The Louis Berger Group, Inc.

Date: 03/22/2012

Laboratory: Accutest Laboratories, New Jersey

Reviewer: Samir A. Naguib

Summary:

1. Data validation was performed on the data for three (3) water samples analyzed for Solids, Total Suspended (TSS) by SM20 2540D.
2. The samples were collected on 12/08/2011. The samples were submitted to Accutest Laboratories, Dayton, New Jersey on 12/09/2011 for analysis.
3. The National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-45, EPA 540-R-04-004, October 2004; Standard Methods 20th Edition, Method 2540D “Total Suspended Solids, Gravimetric, Dried at 103-105°C”; Accutest Laboratories Standard Operating Procedure “Total Suspended Solids (Non-Filterable Residue)”, EGN087-11, February 2011 and Cornell-Dubilier Electronics Superfund Site Quality Assurance Project Plan (QAPP), Modification No.2, September 2011 were used in evaluating the Solids, Total Suspended data in this summary report.
4. In general, the data are valid as reported and may be used for decision making purposes.

Samples:

The samples included in this review are listed below:

Client Sample ID	Laboratory Sample ID	Collection Date	Analysis	Matrix	Sample Status
CDEOU4-SWF-BB-RM5.3-120811-0145	JA94384-1	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM5.3-120811-0235	JA94384-2	12/08/11	TSS	Water	
CDEOU4-SWF-BB-RM5.3-120811-0330	JA94384-3	12/08/11	TSS	Water	

Sample Conditions/Problems:

1. The Traffic Reports/Chain-of-Custody Records, Sampling Report and/or Laboratory Case Narrative did not indicate any problems with sample receipt, condition of samples, analytical problems or special circumstances affecting the quality of the data. No qualifications were required.

Holding Times:

1. All water samples were analyzed within seven days from sample collection. No qualifications were required.

Method Blank (MB), Storage Blank (SB), Field Blank (FB), Rinsate Blank (RB) and Equipment Blank (EB):

1. Method Blank (Batch #: GN59330-MB2) associated with the water samples analyzed on 12/14/2011 was free of contamination. No qualifications were required.

Field Duplicate:

1. A field duplicate pair was not submitted with this SDG.

Laboratory Duplicate:

1. Laboratory Duplicate source sample was associated with a different SDG.

Compound Quantitation and Reported Detection Limits:

1. No QC deviations were observed.
2. Calculation:

$$\text{TSS} = \frac{(A-B) * 1000\text{ml/l}}{(\text{Sample Volume in ml})}$$

Where

A= Weight of evaporating dish + dried sample in mg

B= Tare weigh of evaporating dish in mg

$$\text{Final Result (mg/l)} = \frac{(\text{Vol. x Result } 1^{\text{st}}) + (\text{Vol. x Result } 2^{\text{nd}}) + (\text{Vol. x Result } 3^{\text{rd}})}{(\text{Vol. } 1^{\text{st}}) + (\text{Vol. } 2^{\text{nd}}) + (\text{Vol. } 3^{\text{rd}})}$$

2.1 Sample ID: CDEOU4-SWF-BB-RM5.3-120811-0145 (JA94384-1)

1st run:

Sample Volume (ml): 400

A= 0.13750 g

B= 0.12180 g

Result: 39.25 mg/l

2nd run:

Sample Volume (ml): 300

A= 0.13400 g

B= 0.12120 g

Result: 42.67 mg/l

3rd run:

Sample Volume (ml): 300

A= 0.13690 g

B= 0.12260 g

Result: 47.67 mg/l

Final Result: 42.8 mg/l

Analyte	Laboratory (mg/l)	Validation (mg/l)	%D
TSS	42.8	42.8	0.0

Comments:

1. Validation qualifiers (if required) were entered into the EDD for Bound Brook Water Column Sampling (Dec. 2011).